REMARKS

This application has been reviewed in light of the Office Action dated March 20, 2003. Claims 1-4 and 6-10 are presented for examination. Claim 5 has been canceled, without prejudice or disclaimer of subject matter. Claims 1-4, 6, 7, 9, and 10 have been amended to define more clearly what Applicant regards as his invention. Claims 1 and 8-10 are in independent form. Favorable reconsideration is requested.

A Letter Submitting Corrected Formal Drawings is submitted herewith, in which Figures 10-12 have been changed to include the label --PRIOR ART--, as required in paragraph 2 of the Office Action.

A Claim To Priority and a certified copy of the priority document for this application were filed on October 21, 1999, as evidenced by the returned receipt postcard bearing the stamp of the Patent and Trademark Office, a copy of which is attached hereto. Applicant respectfully requests acknowledgment of the receipt of the certified copy.

Claims 1-5 and 7-10 were rejected under 35 U.S.C. § 103(a) as being obvious over Applicant's admitted prior art, and further in view of U.S. Patent No. 6,462,838 (*Hirata et al.*), claim 6 as being obvious over Applicant's admitted art, and further in view of well-known prior art (M.P.E.P. § 2144.03). Cancellation of claim 5 renders the rejection of that claim moot.

As to independent claims 1, 9, and 10, Applicant has amended these independent claims to incorporate the feature of cancelled claim 5 to define more clearly what he regards as his invention. Applicant submits that these amended independent claims, together with the claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

The present invention is directed to an image processing method for forming an image output condition of an image output unit on the basis of read data of a reference image

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output from the image output unit. As described in detail in the specification, the results of an image printed by different printers may be different from one printer to the next. Similarly, the results of an image repeatedly output by the same printer may also vary because of the unstableness of the output characteristic of the image forming unit and dispersion between the connected devices. In conventional systems, it is possible to stabilize the output density characteristic of a printer using a densitometer, which is very expensive. Alternatively, a flatbed scanner, in lieu of a densitometer, can also be used. However, the reading accuracy of the scanner is insufficient, because, if the patch is put at a different place on the original support board of the scanner, the measured density value can vary greatly.

By virtue of this arrangement, an image output condition generated on the basis of a reference image formed by an image output unit is able to overcome the deficiencies of the conventional systems discussed in the specification.

The aspect of the present invention set forth in claim 1 is an image processing method for instructing an image output unit to output onto a recording medium a reference image based on a predetermined patch pattern, and generating an image output condition of the image output unit on the basis of read data of the reference image output by the image output unit. In the patch pattern, plural identical patches are disposed at different positions on the recording medium and at different positions in a main-scan direction and a sub-scan direction.

One important feature of claim 1 is that plural identical patches are disposed at different positions on the recording medium and at different positions in a main-scan direction and a sub-scan direction.

Hirata et al. relates to forming an image on a multilevel gradation, and is cited as disclosing automatic image density control (AIDC) patterns 90 formed in three or more areas arranged in the main scanning direction so that the density gradient level in that direction is more

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precisely measured, and/or formed in the sub-scan direction. Applicant respectfully disagrees with this understanding of *Hirata et al.* Applicant understands *Hirata et al.* as disclosing an AIDC pattern 90 of different densities formed in regard to each color, and in particular, Figure 12 showing that an AIDC sensor 37 is provided in regard to each color. From Applicant's understanding of the rejection of claim 5, six AIDC patterns 90 corresponding to the AIDC sensors 37 allegedly equating to the identical patches of claim 1. Applicant respectfully submits that even if the AIDC patterns do equate to the identical patches of claim 1, the AIDC patterns of *Hirata et al.* are not disposed at different positions in the sub-scan direction, but are disposed at different positions in the main-scan direction. Applicant submits that nothing has been found in *Hirata et al.* that would teach or suggest plural identical patches disposed at different positions on the recording medium with the identical patches disposed at the different positions, both in a main-scan direction and in a sub-scan direction, as recited in claim 1.

Accordingly, Applicant submits that claim 1 is clearly patentable over *Hirata et al.*

Independent claims 9 and 10 are apparatus and recording medium claims, respectively, corresponding to method claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with claim 1.

As to the rejection of independent claim 8, Applicant respectfully traverses this rejection for the following reason.

The aspect of the present invention set forth in claim 8 is an image processing method. The method instructs an image output unit to output onto a recording medium a reference image based on a predetermined patch pattern, and generates an image output condition of the image output unit on the basis of read data of the reference image output by the image

output unit, where in the patch pattern, the number of patches of black is different from the number of patches of another color.

One important feature of claim 8 is that, in the patch pattern, the number of patches of black is different from the number of patches of another color.

The Office Action cites column 15, lines 60-67 of *Hirata et al.* as disclosing the features of independent claim 8. Applicant understands this cited passage as merely explaining the resolution (number of gradations) of the input image data and the resolution of the output image data. However, nothing has been found in *Hirata et al.* that would teach or suggest that, in the patch pattern, the number of patches of black is different from the number of patches of another color, as recited in claim 8.

Accordingly, Applicant submits that claim 8 is clearly patentable over *Hirata et al.*

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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